

School of Engineering & Technology

KALSEKAR TECHNICAL CAMPUS

INNOVATIVE TEACHING . EXUBERANT LEARNIN

School of Pharmacy

| Knowledge | Resource | & Relay | Centre | (KRRC) |
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| AIKTC/KRRC/SoP/ACKN/QUES/2015-1 | 6/ |
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Date: 06 04 2016

School: SoP-CBSGS

Branch: SoP

SEM: <u>II</u>

To,

Exam Controller,

AIKTC, New Panvel.

Dear Sir/Madam,

Received with thanks the following **Semester/Periodic** question papers from your exam cell:

| Sr. | Subject Name | Subject Code | Format | | No. of |
|-----|------------------------|--------------|--------|---------|--------|
| No. | | | SC | HC | Copies |
| 1 | Pharm. Chem. – I | | | <u></u> | 0 |
| 2 | Biochemistry – I | | | | 0 |
| 3 | Pharmaceutics – I | | | | 01 |
| 4 | Physical Pharmacy – II | | | | 01 |
| 5 | APP – II | | | | 01 |
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Note: SC - Softcopy, HC - Hardcopy

(Shaheen Ansari)

Librarian, AIKTC



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F. Y. B. Pharm. (Semester –II) Periodic Theory Examination (2015 – 2016)

Subject:PP-II Date: 03 -03-2016 Marks: 15M Time: -11.00 am-12.00 pm Q-1. Define- Molecularity of reaction and shelf life. [2M]Q-2. Derive Handerson-Hasselbach equation for weak acids. [2M]Q-3. Derive an equation for specific rate constant and half life of first order reaction. [2M] Q-4. Discuss Henry law of solubility of gases in liquid. [2M] Short note on Pharmaceutical buffers and their application. Q-5. Discuss the effect of temperature on the solubility of partially miscible liquid with example. [2M]**Q-6.** Discuss various methods to adjust the tonicity of solution. [2M]

Describe different methods to determine order of reaction.

Q-7. Write a note on Arrhenious equation and give its significane in pharmacy.

[3M]

OR

Short note on accelerated stability studies in pharmacy and explain decomposition of drug by different methods.





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F. Y. B. Pharm. (Semester -II) Periodic Theory Examination (2015 – 2016)

Subject: Pharmaceutics I

Date: -

Time: - 11.00 am -12.00 pm

Marks: 15M

Questions

Marks

1. Answer any Two

5X2=10

- (a) Describe the method for the determination of particle size by sieve method..
- (b) Describe the method for the determination of particle size by sedimentation method...
- (c) Define true density, bulk density, granule density with formula.
- (d) Describe the factors influencing size reduction.

2. Write notes on (any two).

2.5x2=5

- (a) Working principle of Ball bill.
- (b) Newton's law of flow of liquid.
- (c) Working principle of cyclone separator.
- (d) Pseudoplastic flow of liquid.





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F. Y. B. Pharm. (Semester –II) Periodic Theory Examination (2015 – 2016)

Subject: BIOCHEMISTRY-I

Marks: 15 M

Questions

Date: - 1/03/16 Time: - 11-12 am

| Questions | Maiks |
|---|---|
| Qs.1.a] Define epimers? Give example with respect to carbohydrates. | [1M] |
| b) Write a short note on starch. | [3M] |
| c] Draw the structure of lactose. | [1M] |
| Qs.2. a) Answer the following question | [1M] |
| i) Name a water soluble vitamin synthesized by bacteria | |
| ii) Give coenzyme for thiamine and its deficiency | |
| b) Explain in detail with proper examples / structure (any TWO) | [2M] |
| i) Structure of vitamin B ₉ and its deficiency | |
| ii) Note on Nicotinamide | |
| iii) Write a note on biological role of Ascorbic acid | |
| c) Write in detail (any ONE) | [2M] |
| i) Discuss biological role of vitamin B ₆ or B ₁₂ | |
| ii) Write a note on Riboflavin or Pantothenic acid. | |
| Qs 3.a Enlist factors affecting enzyme activity. | [2M] |
| b] Derive Michaelis menten Equation. | [2M] |
| c] Draw well labelled diagram of Lineweaver-Burk Doubble reciprocal Plot. | [1M] |
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F. Y. B. Pharm. (Semester –II) CBSGS

Periodic Theory Examination (2016)

Date: - 29/02/16

Subject: Pharmaceutical Chemistry-I Time: - 11.00 am-12.00 pm Marks: 15 Marks

Q.1 Draw structure of Calcium disodium Edetate and Desferroxamine

[02M]

Q.2 Explain Oxygen in detail.

[03M]

Q.3 Write Short notes on (Any two)

[05M]

- a) Dentrifices and Desentizing agents
- b) Nitrous Oxide as a Potential Anaesthetic
- c) Disodium EDTA
- Q.4. Write a note on natural water and portable water

[02 M]

Q.5. Pharmaceutical uses of HCl? describe in brief the composition of soda lime?

[03 M]

Balance this equation

$$H_2SO_4 + H_2O$$

$$A + B$$

$$HSO_4 + C$$

 $D + SO_4^{-2}$





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F. Y. B. Pharm. (Semester -II) Periodic Theory Examination (2015 - 2016)

Subject:APP-II Marks: 15M

Date: 4/3/2016 Time: -11.00 am-12.00

All questions are compulsory.

Q-1. Discuss central control of respiration.

[3Marks]

OR

Explain the neural regulation of respiration.

Q-2. Explain External and Internal respiration with diagram.

[2 Marks]

Q-3: Attempt any TWO questions

[6 Marks]

- A. Draw a well labeled diagram of neuron and comment on the role of dendrites, cell body and axon.
- B. Describe the classes and functions of neurotransmitters.
- C. Explain the events of signal transmission at chemical synapse.
- D. Differentiate somatic and autonomic nervous system.

Q-4: Write a short note on (ANY TWO)

[4 Marks]

- A. Internal anatomy of spinal cord
- B. Stretch reflex arc
- C. Cerebrum



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